

Amendments to the Specification

Please replace paragraph 0013 with the following amended paragraph:

[0013] It should be appreciated at the outset that while the present invention relates to an “Microscope and Focusing Device for a Microscope”, the Assignees of the present Application for Patent have developed certain other improvements to microscopes described in United States Patent Application entitled “Ergonomically Arranged Object Adjustment Controls”, U.S. Patent Application No. 10/811,344 which application is filed concurrently herewith by the Assignees of the present Application for Patent, which Application is incorporated herewith by reference in their entireties.

Please replace paragraph 0016 with the following amended paragraph:

[0016] Fig. 2 provides a perspective view of microscope 1, wherein several elements are not shown in order to obtain a better view of microscope stand 2. Microscope stand 2 has a flange 11 for mounting a tube (not shown). In addition, microscope stand 2 includes mounting element 12 for microscope stage 6 (see Fig. 1). Mounting element 12 is moved by focusing device 20 parallel to optical axis 5 of objective 4 which is placed in the operating position. Inside microscope stand 2 focusing device 20 is mounted, wherein focusing device 20 has first end 14a and second end 14b (see Fig. 3). First and second ends 14a and 14b extend through opening 15, which is formed in first and second side walls 2a and 2b of microscope stand 2. As already mentioned in the description of Fig. 1 operating ~~element~~ elements 8 ~~is~~ are mounted at first end 14a and at second end 14b. In the embodiment as shown in Fig. 2 opening 15 has the shape of a curved oblong hole, which is formed in opposing side walls 2a and 2b of the microscope stand 2. It should be obvious to a person having ordinary skill in the art that opening 15 may as well be in the shape of a straight hole.

Please replace paragraph 0018-0019 with the following amended paragraph:

[0018] Fig. 3 shows a 3-dimensional view of focusing device 20 which is mounted inside of microscope stand 2. Focusing device 20 defines pivot axis 23, around which focusing device 20 can be pivoted. Focusing device 20 comprises two elongated bore holes 25 through which a pin of an axis (not shown in Fig. 3) is guided, with which focusing device 20 is mounted pivotable inside microscope stand 2. Accordingly, pivot axis 23 of focusing device 20 runs in the center of two bore holes 25 which is shown in Fig. 3 with a dashed line. These bore holes 25 hold a second axle 21 (shown in Fig. 4A). Focusing device 20 has an additional first axle 26 which is arranged coaxial to pivot axis 23. First axle 26 rotates around axis 27 and first axle 26 defines first and second ends 14a and 14b, to each of which operating element 8 of focusing device 20 is mounted. The rotating movement between first axle 26, focusing device 20 and second axle 21 is transmitted without any slip. Accordingly, gear wheel arrangement 22 is fixed on second axle 21. A plurality of gear teeth are formed at an area in the middle of first axle 26 and constitute first gear wheel 21a. Gear wheel arrangement 22 comprises first gear wheel 28a with a large diameter and second gear wheel 28b with a small diameter. First gear wheel 28a has a larger diameter than second gear wheel 28b. Gear wheel arrangement 22 is mounted on second axle 21 of focusing device 20. Second gear wheel 28b transfers its rotational movement to gear rack 42 (see Fig. 4a) which moves microscope stage 6 in the direction of optical axis 5. The rotating movement of second axle 21 is transferred to gear rack 42 (see Fig. 4a), which moves microscope stage 3 6 in the direction of optical axis 5 of objective 4 in the working position. Therefore, gear wheel arrangement 22 is mounted permanently on second axle 21. Second gear wheel 28b of gear wheel arrangement 22 is in engagement with gear rack 42.

[0019] Fig. 4a shows a perspective view of focusing device 20 in cooperation with gear rack 42 for moving microscope stage 6 and adjustable stop mechanism 44. Operating element 8, which has a coarse focus and a fine focus (not shown), and microscope stand 2 are, due to simplicity, not shown here. First axle 26 extends across the inside 2c of microscope stand 2. Second axle 21 carries gear wheel arrangement 22 and rocker 47 which cooperates in certain positions with adjustable stop mechanism 44. Adjustable stop mechanism 44 comprises rod 46, spring 48 for biasing rod 46 and screw 50 for fixing a position of rod 46. As shown in Fig. 2

screw 50 is accessible from side wall 2a or 2b of microscope stand 2. Rod 46 has first end 46a and second end 46b. First end 46a carries spring 48 and second end 46b includes surface 52 against which one part of rocker 47 abuts and consequently limits any further rotation of operating elements 8. This means that a movement of microscope stage 6 in the direction to objective 4 is limited and this avoids any damage of the microscope slide or objective 4. Rod 46 is flattened at first end 46a and therefore shows flattened area 54 which enables a better and secure fixation by screw 50.

Please replace paragraph 0022-0023 with the following amended paragraph:

[0022] Fig. 5 shows a front view of focusing device 20 in cooperation with gear rack 42 for moving the microscope stage and adjustable stop mechanism 44. First axle 26 defines first and second end 14a and 14b, to each of which operating element 8 of focusing device 20 is mounted. First axle 26 is arranged parallel to second axle 21. Second axle 21 carries gear wheel arrangement 22, which comprises first gear wheel 28a and second gear wheel 28b. First gear wheel 28a includes pin 60 mounted close to its periphery. Pin 60 cooperates with rocker 47, which is arranged as well pivotable on second axle 21. As already mentioned in the description for Fig. 5 4a rocker 47 abuts against surface 52 of rod 46. This is caused by a certain position of first gear wheel 28a of gear wheel arrangement 22.

[0023] Fig. 6 shows the arrangement of the focusing device 20 is on the interior 2c of the microscope stand 2. The focusing device 20 extends between the two opposing side walls 2a and 2b of the microscope stand 2. The interior 2c of the microscope stand 2 has a dividing wall element 62 in which the rod 46 and the spring 48 are guided. The dividing wall element 62 provides as well a guide for the screw 50 (see Fig. 6) which fixes the position of the rod 46 and consequently the fixing of a position of the rod 46, which in turn fixes the surface 52 against which one part of the rocker 47 abuts.